To provide the correct picture of service availability, the simulation will have to consider the capability of each unit to operate within its acceptable operational parameter, i.e., as a communication user; to estimate the capability of other such users to operate, the simulation has to estimate the level and type of noise present at the input of each unit, primarily due to the signals emitted by all devices in their role as sources of interference. Therefore, the information that each manufacturer should provide should include all data required to consider its devices as users and interferers. A preliminary list of such data includes:

- Operating frequency (or frequencies) and frequency plan
- Transmitted power
- Antenna gain (a statistical antenna pattern may be required for a realistic 3D simulation)
- Sensitivity of the receiver (performance as a function of SNR) in the presence of in-band and adjacent channel interference
- Modulation scheme and symbol rate
- In-band and out-of-band spectral characteristics
- Sequence of communication events, their duration and respective statistics. It is important to identify failure conditions and recovery procedures for each event.
- Typical scenarios in terms of distribution of units in urban and suburban environments, in- and out-of-building deployments, antenna heights and distance between units comprising a link.

As soon as the information is collected, I recommend we get together to define the extent, resources and schedule of the simulation. My direct-dial office telephone number if 310-338-7192.

Sincerely yours,

Yair Karmi
Vice President
Technology Development

CERTIFICATE OF SERVICE

I, Lydia N. Hicks, Secretary, at the law firm of Lukas, McGowan, Nace & Gutierrez, Chartered, certify that true copies of the foregoing document were sent this 18th day of July 1994, via first class mail, postage prepaid to the following:

Chairman Reed E. Hundt*
Federal Communications Commission
Room 814, 1919 M Street, NW
Washington, DC 20554

Commissioner Andrew C. Barrett*
Federal Communications Commission
Room 844, 1919 M Street, NW
Washington, DC 20554

Commissioner Rachelle B. Chong*
Federal Communications Commission
Room 844, 1919 M Street, NW
Washington, DC 20554

Commissioner Susan Ness*
Federal Communications Commission
Room 832, 1919 M Street, NW
Washington, DC 20554

Commissioner James H. Quello*
Federal Communications Commission
Room 802, 1919 M Street, NW
Washington, DC 20554

Rudolfo M. Baca*
Office of Commissioner Quello
Federal Communications Commission
Room 5202, 2025 M Street, NW
Washington, DC 20554

Ralph A. Haller*
Chief, Private Radio Bureau
Federal Communications Commission
Room 5002, 2025 M Street, NW
Washington, DC 20554

Byron F. Marchant*
Office of Commissioner Barrett
Federal Communications Commission
Room 826, 1919 M Street, NW
Washington, DC 20554

Michael J. Marcus*
Field Operations Bureau
Federal Communications Commission
Room 734, 1919 M Street, NW
Washington, DC 20554

Ruth Milkman*
Office of Chairman Hundt
Federal Communications Commission
Room 814, 1919 M Street, NW
Washington, DC 20554

Jane E. Mago*
Office of Rachelle B. Chong
Federal Communications Commission
Room 844, 1919 M Street, NW
Washington, DC 20554

Richard M. Smith*
Chief, Field Operations Bureau
Federal Communications Commission
Room 734, 1919 M Street, NW
Washington, DC 20554

Thomas P. Stanley, Chief Engineer*
Office of Engineering and Technology
Federal Communications Commission
Room 7002, 2025 M Street, NW
Washington, DC 20554

John J. Borkowski*
Private Radio Bureau
Federal Communications Commission
Room 5205, 2025 M Street, NW
Washington, DC 20554

Beverly G. Baker*
Private Radio Bureau
Federal Communications Commission
Room 5002, 2025 M Street, NW
Washington, DC 20554

Bruce A. Franca*
Office of Engineering and Technology
Federal Communications Commission
Room 7002-A, 2025 M Street, NW
Washington, DC 20554

David R. Siddall*
Office of Susan Ness
Federal Communications Commission
Room 832, 1919 M Street, NW
Washington, DC 20554

Lydia Hicks

Lydia N. Hicks

*Hand Delivery